

Loving all - based on principles of  
loyal. offr - personally  
~~not~~ Loyal to esp. denotes  
affection & these principles

Officer - Example

Chief m<sup>t</sup> - sufficiently

Know your job - get complete idea of own  
functions & jobs. Code & song to  
follow & willing & anxious fit.  
Directions of

100 for each set differences. In  
the Office -

Loyal to & recognized flags  
Important & willing, own singing  
order & uniform

Honor - duty, culture & the  
Godlike - firmness & energy & respect.

Uniform - sign of honored name

Cops grouped to form Armies - masses.

Battalion - Known as unit - largest  
from unit in army - grouped to form  
brigades. 3 Batt to Brig. Very imp  
part larger self sufficing Act indep  
under Divisional Hdqrs. Offr - Lt.-Col  
Staff to assist them - Administrative  
Staff + Special Consult + tales  
sig'd off + Co. Comms. agree 2 I.C. &  
in Com - Adj + Int. Off + Med. Off.  
5 Co. - Major - field/0.

Smaller supp. attained. 1 Hdqrs Co. - 6 Platoon,  
1. Signals  
2. Anti Aircraft  
3. Mortar (3" 16")  
4. Carrier - Gun  
5. Barracks  
6. Admin.

Army - long  
Cops - see in chapter

Division - 4 Regt - 9 Btts to 3 Platoon

Brigade - Brigade - Infantry - 3 section

Battalion - Lt. Col.

Company - Major

Platoon - Lieut.

Secton - Capt + 6 Gp

Same Capt -

Capt - 3

Capt - 3

Major - same

Lt. Col. - + 1 star

Col - .. + 2 Mounted on

Brig - .. + 3

Regt - Batt - mounted + horses, 1 star

Lt. - same - mounted + horses + same

Field marshal - 1 same, colonel, same, mounted

## Protection of Person & Property.

Gas mask perfect protection against all three tear gases. Inflammation pain blind eyelids, tears. Aim - fresh air, little saline sol. to bathe. Little olive oil in eye - slightly warm.

Civilian Duty Gas Mask - easy to handle this gas prod. Head harness for holding on and should be comfortable. Harness in 2 pieces separate 2 bands big chin well in full way back & release harness. Make one strap R loose. By eyes can see if wearing correct size. Imp. Too small, Adjust strap just so comfortable & weaker.

To remove - place 2 fingers under mask under chin and pull off. Don't use metal part to pull it off.

Adjust by top 2 & then side 2 & lastly bottom 2. Have 2 to adjust to chin X-section at centre of 3 compartments.

Inside container - 1. filled w activated charcoal & beneath pad of wool (usually marina) wool has no effect in decontaminating gas. Therefore has 2 tear gas. Wool traps particles of gas out of & doesn't allow 2 pass thru charcoal for being & weighed gas.

Last 72 hrs. (long) Only in use when in concentration. Protect container from moisture.

2. Inside rubber vent. Flatten down on container as break out. See if vent

clear from moisture. If in the container  
only out this end. Throat not rolled  
up so much glass will break -  
if fractured not gas proof. In  
bad pieces glass may rot.

1. Container - see if damaged.
2. Small valve made (cemented on container)  
lays perfectly flat & not cracked  
in any way.
3. Enamie jet sleeve goes fine &  
Container.
4. Take between fingers & thumb & states  
to see if porous. Hold this & light.  
Also outside colour.

Moisture inside must be dried -  
by cotton wool or hang in dry place.  
Soak 13% & gently dip sponge along  
face piece. Formalin .02%. Put away  
perfectly straight.

### Service Throat

Container similar. Tube corrugated  
rubber. In bottom of C. & slot 2 on each  
side. Allow air to enter.

Face piece - strong rubber & deflated or  
half eye piece - air valve. In breath  
this take

comfortable pad for back of head.

To first aid

A.R.P.

WB Deportation.

## Nick & Arthur

Nick - used to fill up under muscle & levitate feel a mill. In books now & good spray. Not much know about it. 16 persistent, colourless & oily liquid. Some effect on nasal passages - wouldn't like cause this vapour. Respirator complete protection again.

Arthur - non persistent as vapour. Good odour in low concentration of gallic. Longer persistent - greyish green or white. Can be made black by burning. Used to contaminate coal or earth. Effect in moisture gives fumes having funny effects in individuals - irritate respiratory to navigate thus paralyse ... not able to support wt. of B. Hat to nose, won't talk, went asleep - not soldered. W progress of poisoning, funny yellow colour. Blood cells collapsed & anaemia follows in & requires strong & strenuous treatment & exercise. If don't recover further results face him to copper. Moxiany & liver effected him "inky red". - After 3 days if keeps up urine comes & death as result of convulsions. Chemical detecta type A. used

Every one 100% protected against by  
Gas Mask.

To detect. Give orange tint to white paper

Chloro-gases

in presence of liquid refrigerant  
turn brown or red. K. S. N. & B. B. C.  
also give same effect but tear producing  
qualities give them away.

Domestic Gas - Breaking explosion  
or sabotage  
Hydro and used in any city & destroying  
men in houses 1 or 2 sniffs for death.  
Refrigerant smell - bitter apples.

Hydrogen sul. H<sub>2</sub>S.

Very dangerous. Direct paralytic effect  
on breathing centre of brain. Result of  
explosion of domestic refrigerator plant  
storage vaults for pens.

Ammonia - part of refrigerant.

Carbon Monoxide - no odour in cities, slow  
effect to a point when animal effects rapid.

Pittas Pride Games - Hindostan - explaining  
breaking down buildings.

Your mask isn't worth anything aga  
these gases. Stay in presence of fresh air  
when gases likely to be. Not too inquisitive  
to anyone yelling if only got on "pig snout"  
mask. Wait for service Mask.

more by rubbing. liable to introduce infection by irritation. Immediate in effect, very effective in weak concentration. Usually possible in short time & area, area of pure area & possible to guide person struck to safe place & relieve him for 15 mins. - Long time to yesterday, think he is lost, won't take to First Aid Box. If have group - line up & join by chain feeling of company & follow alone. Don't let go of chain & get lost.

~~solid~~ Chokes C. A. P. white crystal or body. Heavy fume, may be candle smoke in heat. Work well in warm ground. Usually in boats & boats. Known to non-persistent. Used by police by gassing mobs. Used as test for masks.

Aldyl-ido-ste - K. S. K. -

1. persistent - liquid
2. pure form colorless - in war heavy oily dark brown liquid.
3. Pure odour of its own - called fear-drops nail polish removers smell.

+ severe acting - last long.

4. Give off fumes & long time as oily nature

B. B. C.

1. Dark brown oily - persistent.

2. Not so strong as 1 but last & less.

? H. P. drops are usually 2-3 mins.

K. S. K. very severe - last.

B. B. C. severe

Nonal - all contain arsenic. Visible appearance of smoke. Not so imp. because masks removes 100%. In masks now filter keeping out dentritic particles. Not soluble in water - can't driven off. Has odorous no value & spotting.

Bi-phenyl-chlor-arsene - D. A.  
" " amino " - D. M. more likely to be used. yellow crystal, gives off yellow smoke  
Bi-phenyl-sans-arsene - D. C.

Tung Intants - death dealing effects obviously not from poison but physiologically appeal on lung tissues. Instead of passing this stuff & irritate secreting mucus which makes person drown by own edema & lungs no air able to get in cause humans in air cells.

Chlorine - 1. Chlorine - 2. Phosgene - 3. Diphosgene.

1. Chloro-Picrin

1. Some colored - 1915 by German 1<sup>st</sup> very irritating scalding & coughing spasmic like when slate again. Odor of chloride of lime like whooping cough hor-pain.
2. Most toxic 1.0% more than 0.1 but in natural setting liquid. 46.8% boiling point. Leaves no residue but liquid dark brown. Hence colorless vapor at 5° given off but as liquid visible like gas also. Helps for people & put on mask because 5° noticed by running eyes. Lung action treated delayed. Tearing of brain people stand up. don't last long.

## Gases.

lecture III.

### What war gases are Physical Characteristics

Gas used in general sense. Don't need to be gaseous. War gas any substance acting in poisonous way upon body. Not by individual breathing form of gas or vapor physiological effect.

2 classes as environment

1. non-persistent when liberated converted in vaporous gas or smoke & not always visible except when gaseous not true. Travel in cloud. Leave no liquid residue or any residue behind them. Travel in wind & depend on velocity. Too long <sup>4<sup>hrs</sup></sup> diluted - not so much effect.

2. Persistent - usually liquid type. Evaporate slowly as oily & sticky film of dangerous vapor often invisible. Oily on which fall kinds of pieces as long as it evaporates, or else other step takes to mineralize substance. May die undusted till interred.

Mustard gas - depended on value of vapor alone from persistent type. Often remain in shed hole 4 days. Gas mostly shot by soldiers last war. To-day light thin shield bomb & dropped. Planes fly low & spray gas. Left out powder. Any place open

### Objects -

1. Causing large no. of casualties in given area in short time. People afraid of it causing chaos effecting morale of all anti-German.
2. Radar & arrest industrial life. - Intense pain by numbing people so production can't proceed.
3. Keep military people in our quarters to bring about surprise attack.
4. Make food & stores bad for use - waste which is imp. common now but by enemy reprehensible. Use combination of gases no.

Weather effects gas. Warm whether better for persistent gas. Cold " little effect or non " In rains tendencies to freeze. Track around to warm surroundings which take effect. Rain often cleansing atmosphere & streets, but moisture helps evaporate.

Good weather - low wind, clear night, ground moist.

### Effects upon Body.

1. Tear gases - irritate eyes - lacrimates.
2. Nose irritants - sterilizes.
3. Lung " - Ash
4. Blister Gases - vesicles.

Will mix - confuse in defense & treatment of.

1+2 possess features common to all  
blasts & - instances. Not fatal & not permanent in effect. Selective in irritation in new endings of eyes - blinded by tear - overflow, - swollen a bit by capill